

CLAIMS

WHAT IS CLAIMED IS:

1 1. A method for performing secure electronic transactions using a wireless
2 telephony system, said method comprising the steps of:
3 receiving a request for an electronic transaction at a vendor system, said
4 request including a telephone number associated with a wireless telephone;
5 transmitting, in response to receipt of said request for an electronic
6 transaction, a request for authorization from said vendor system to a transaction
7 authorization system;
8 transmitting, in response to receipt of said request for authorization, a
9 request for confirmation from said transaction authorization system to a messaging
10 system associated with said wireless telephony system, said messaging system
11 transmitting, in response to receipt of said request for confirmation, a message to
12 said wireless telephone associated with said telephone number, said message
13 including a request for a user of said mobile device to send a reply to said message
14 to confirm said request for an electronic transaction;
15 receiving at said transaction authorization system a reply to said message
16 from said mobile device;
17 determining, from the content of said reply, whether a user of said mobile
18 device has confirmed said electronic transaction; and

19 transmitting, in response to a confirmation of said electronic transaction, a
20 transaction authorization message from said transaction authorization system to
21 said vendor system; and
22 completing, in response to receiving said transaction authorization message,
23 said electronic transaction at said vendor system.

1 2. The method recited in Claim 1, wherein said request for an electronic
2 transaction is transmitted to said vendor system from an electronic device other
3 than said wireless telephone.

1 3. The method recited in Claim 1, wherein said request for an electronic
2 transaction is transmitted to said vendor system from said wireless telephone.

1 4. The method recited in Claim 1, wherein messaging system associated with
2 said wireless telephony system comprises a Short Message Service (SMS) center.

1 5. The method recited in Claim 1, wherein said transaction authorization system
2 comprises a database for storing User Profiles, each User Profile including at least
3 a telephone number and payment source information.

1 6. The method recited in Claim 5, wherein said payment source information
2 comprises a credit card number.

1 7. The method recited in Claim 5, wherein said transaction authorization
2 message includes said payment source information.

1 8. The method recited in Claim 1, wherein said request for authorization, said
2 request for confirmation, and said message to said wireless telephone each include
3 a merchant identifier associated with said electronic transaction.

1 9. The method recited in Claim 1, wherein said request for authorization, said
2 request for confirmation, and said message to said wireless telephone each include
3 the cost of said electronic transaction.

1 10. The method recited in Claim 1, wherein said request for confirmation and
2 said message to said wireless telephone include a request for said user to provide
3 a user code.

- 1 11. The method recited in Claim 10, wherein said method further comprises
2 the steps of:
3 comparing said user code to a code stored in a User Profile; and
4 sending a transaction rejection message to said vendor system if said
5 user code is not identical to said code stored in said User Profile.

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1 12. A transaction authorization system for performing secure electronic
2 transactions using a wireless telephony system, said system comprising:

3 a computing system, including:

4 a processor;

5 random access memory (RAM) coupled to said processor;

6 non-volatile memory coupled to said processor; and

7 an input/output subsystem coupled to said processor, wherein said

8 processor, RAM and non-volatile memory are operative to retrieve

9 and execute digitally-coded instructions stored in said non-volatile

10 memory, and to transmit and receive information to and from

11 remote systems via said input/output subsystem; and

12 digitally-coded instructions stored in said non-volatile memory, said digitally-
13 coded instructions operative to cause said computing system to perform the steps

14 of:

15 receiving a request for authorization of an electronic transaction from

16 a vendor system, said request for authorization including a telephone

17 number associated with a mobile device;

18 transmitting, in response to receipt of said request for authorization,

19 a request for confirmation to a messaging center associated with said

20 wireless telephony system, said messaging center being operative to 1)

21 transmit, in response to receipt of said request for confirmation, a message

22 to said mobile device associated with said telephone number, said message
23 including a request for a user of said mobile device to send a reply to said
24 message to confirm said request for an electronic transaction, 2) receive at
25 said messaging center a reply to said message from said mobile device, and
26 3) transmit said message to said transaction authorization system;
27 determining, from the content of said message, whether a user of said
28 mobile device has confirmed said electronic transaction; and
29 transmitting, in response to a confirmation of said electronic
30 transaction, a transaction authorization message to said vendor system.

1 13. The transaction authorization system recited in Claim 12, wherein a request
2 for said electronic transaction is transmitted to said vendor system from an
3 electronic device other than said wireless device.

1 14. The transaction authorization system recited in Claim 12, wherein a request
2 for said electronic transaction is transmitted to said vendor system from said
3 wireless telephone.

1 15. The transaction authorization system recited in Claim 12, wherein messaging
2 system associated with said wireless telephony system comprises a Short Message
3 Service (SMS) center.

1 16. The transaction authorization system recited in Claim 12, wherein said
2 transaction authorization system further comprises a database for storing User
3 Profiles, each User Profile including at least a telephone number and payment
4 source information.

1 17. The transaction authorization system recited in Claim 16, wherein said
2 payment source information comprises a credit card number.

1 18. The transaction authorization system recited in Claim 16, wherein said
2 transaction authorization message includes said payment source information.

1 19. The transaction authorization system recited in Claim 12, wherein said
2 request for authorization, said request for confirmation, and said message to said
3 wireless device each include a merchant identifier associated with said electronic
4 transaction.

1 20. The transaction authorization system recited in Claim 12, wherein said
2 request for authorization, said request for confirmation, and said message to said
3 wireless device each include the cost of said electronic transaction.

1 21. The transaction authorization system recited in Claim 12, wherein said
2 request for confirmation and said message to said wireless device include a request
3 for said user to provide a user code.

1 22. The transaction authorization system recited in Claim 21, wherein said
2 digitally-coded instructions are further operative to cause said computing system to
3 perform the steps of:

4 comparing said user code to a code stored in a User Profile; and

5 sending a transaction rejection message to said vendor system if said
6 user code is not identical to said code stored in said User Profile.